

WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

Machine Id 56170 Component Diesel Engine Fluid SAE 10W30 (--- LTR)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

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Metal levels are typical for a components first oil change.

CONTAMINATION

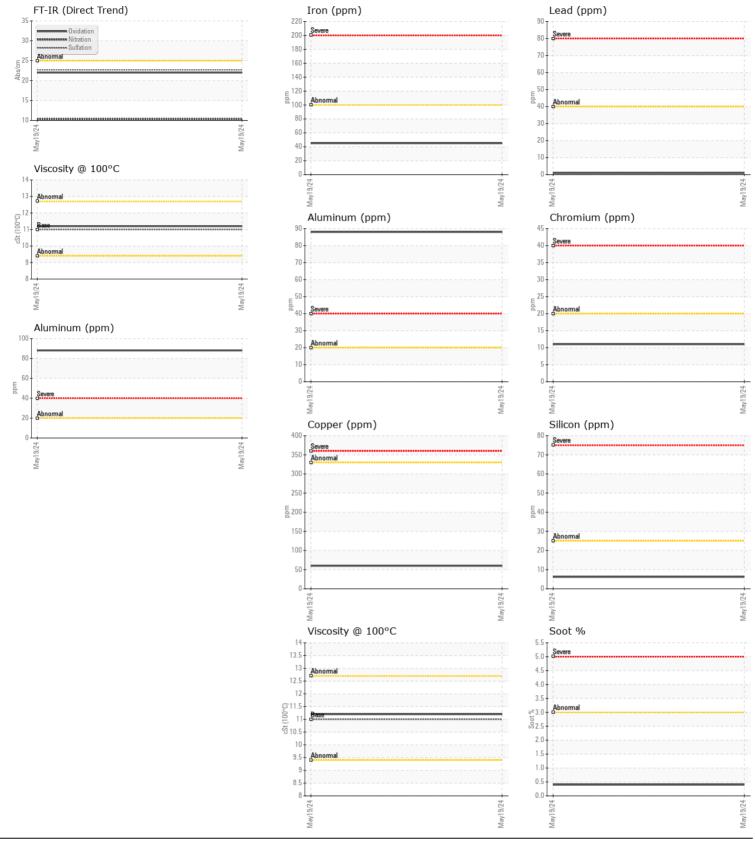
Elevated aluminum (AI) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

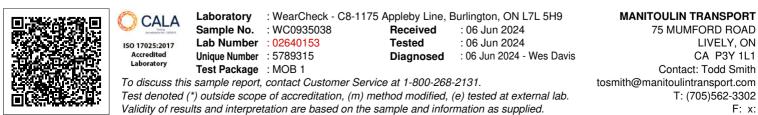
FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0935038		
Sample Date		Client Info		19 May 2024		
Machine Age	mls	Client Info		38336		
Oil Age	mls	Client Info		38336		
Filter Age	mls	Client Info		38336		
Oil Changed		Client Info		Changed		
Filter Changed		Client Info		Changed		
Sample Status				NORMAL		
Iron			. 100	AE		
Iron	ppm	ASTM D5185(m)	>100	45		
Chromium Nickel	ppm	ASTM D5185(m)	>20	11		
Titanium	ppm	ASTM D5185(m) ASTM D5185(m)	>4	<1		
	ppm	()	0	0		
Silver	ppm	ASTM D5185(m)	>3	0		
Aluminum	ppm	ASTM D5185(m)	>20	88		
Lead	ppm	ASTM D5185(m)	>40	<1		
Copper	ppm	ASTM D5185(m)	>330	60		
Tin	ppm	ASTM D5185(m)	>15	2		
Vanadium	ppm	ASTM D5185(m)		0		
Silicon	ppm	ASTM D5185(m)	>25	6		
Potassium	ppm	ASTM D5185(m)	>20	161		
Fuel		WC Method	>5	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
Soot %	%	ASTM D7844*	>3	0.4		
Nitration	Abs/cm	ASTM D7624*	>20	10.3		
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.7		
Emulsified Water	scalar	Visual*	>0.2	NEG		
Sodium		ASTM D5185(m)	>228	4		
Boron	ppm	ASTM D5185(m)	>220	6		
Barium	ppm	ASTM D5185(m)		ہ <1		
Molybdenum	ppm ppm	ASTM D5185(m)		61		
Manganese	ppm	ASTM D5185(m)		2		
Manganese	ppm	ASTM D5185(m)		945		
Calcium	ppm	ASTM D5185(m)		1242		
Phosphorus	ppm	ASTM D5185(m)		919		
Zinc	ppm	ASTM D5185(m)		1179		
Sulfur	ppm	ASTM D5185(m)		1741		
Oxidation	Abs/.1mm	ASTM D3103(III)	>25	22.0		
Visc @ 100°C	cSt	ASTM D7279(m)	11.0	11.2		
100 @ 100 0	001		11.0			

Contact/Location: Todd Smith - MANLIV





Contact/Location: Todd Smith - MANLIV Page 2 of 2